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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

HENDRICKSON, STUART L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1754

DATE MAILED: 08/20/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

069362

Applicant(s)

Anthony

Examiner

Hickman

Group Art Unit

186

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 5/15/03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-29 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-29 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) In claims 1, 28, 'improve(ing)' is subjective and unclear. 'change' is suggested. Similarly, 'discolored' is unclear- see also claims 2, 3, etc. In claims 24-27, 'fancy' is subjective and unclear.

B) In claim 1 c, given that the graphite-stable region encompasses room temperature and atmospheric pressure, 'elevated' is unclear as to the basis for comparison.

C) In claim 3, 'with platelets' is unclear as to how the platelets relate to the diamond structure.

D) The recitation of colors is potentially unclear, in view of colorblindness, etc. Note that the difference between claims 8 and 9 (26 and 27) is not entirely clear.

E) Claims 24 and 25 are duplicates.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 23-27 and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Satoh et al. 4959201.

Satoh describes in the examples a yellow diamond whose color is altered to green. Although no color photographs are available, it appears that if the conversion of the nitrogen centers is incomplete, a residual yellow would be present. Alternately, someone with impaired color perception would or could deem the color to be yellow green or green/yellow.

Where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

Claims 23-27 and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Harlow book.

Page 24 depicts in color green-yellow diamonds. Although the process is not discussed, the rejected claims are product claims, indistinguishable from the products shown-Brown and Fessmann supra.

Claims 23-27 and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Strong et al. 4124690.

Strong teaches in column 2 the existence of yellow/green diamonds. Although the process steps are not taught, the diamond is deemed to be the same as claimed-Brown and Fessmann, supra.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strong et al. '690, alone or taken with Wentorf, Jr. 3609818.

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Strong teaches in columns 4-6 treating a Type 1b by annealing at elevated temperature and pressure in a press, resulting in a change of color. This differs from the claims only in not reciting a pressure-transmitting pill encasing the diamond, however Strong teaches placing graphite around the diamond. This is deemed to render the use of a pill as obvious, in order to gain the benefits recited in column 4. Therefore, it is deemed that the diamond is inside a pill- especially after the pressing starts and compacts the graphite powder.

In so far as Strong does not teach or form a pill, or that the claims require the presence of a pill prior to insertion into the apparatus, Wentorf teaches in column 4 the use of talc (which contains MgO) or salt as a pressure-transmitting medium. Using talc in the process of Strong is an obvious expedient to attain uniform pressure on the diamond being treated and prevent inhomogeneous pressure and corresponding defects.

Concerning the various dependent claims, treating diamonds have a particular type, N content or platelets is an obvious expedient to make a more valuable material, as is repeating the treatment for improved effect.

Claims 1-16, 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon 3134739.

Cannon teaches in column 2-4 placing colored diamond and graphite filler into a press and treating under HP/HT, with a resulting change in color. As the diamonds are yellow, it appears they are Type 1A; if not, using the claimed type is an obvious expedient to treat an available diamond. Cannon does not describe the use of a pill, forming the graphite/diamond charge into a pill is an obvious expedient to avoid air pockets which would interfere with the pressure transmission or diffusion of the Al. Repeating the process is an obvious expedient to attain the desired effect.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.

A handwritten signature in black ink, appearing to read 'Stuart Hendrickson', is positioned above the printed name.

Stuart Hendrickson
examiner Art Unit 1754